

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO.

CEASE AND DESIST ORDER
REQUIRING
LAKE COUNTY SANITATION DISTRICT
KELSEYVILLE COUNTY WATER WORKS DISTRICT NO. 3
LAKE COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Board") finds that:

1. Waste Discharge Requirements (WDRs) Order No. 99-094, adopted by the Regional Board on 11 June 1999, prescribes requirements for the Lake County Sanitation District, Kelseyville County Water Works District No. 3 (hereafter referred to as "Discharger").
2. The Discharger's wastewater treatment facility is near the town of Kelseyville, in Section 11, T13N, R9W, MDB&M, while the disposal facilities are 2.5 miles away in Section 13, T13N, R9W, MDB&M.

Treatment Facility

3. The wastewater system serves most of the town of Kelseyville and portions of the surrounding areas. The wastewater system provides secondary treatment of a dry weather flow of 0.26 million gallons per day (mgd) of domestic wastewater with effluent disposal to a series of evaporation/percolation ponds or for use as irrigation supply water.
4. The wastewater system consists of three facultative ponds, a chlorine feed and contact system, and a fourth hydraulic pond. From these ponds, the wastewater is pumped to a remote disposal site consisting of a series of seven evaporation/percolation ponds and an irrigation area. A small portion of the wastewater is also used to irrigate approximately five acres of vineyard owned by Mr. Michael Fowler (regulated by WDRs Order No. 99-070).

Violations of Waste Discharge Requirements

5. Discharge Specification No. B.2 of WDRs Order No. 99-094 states: "*The monthly average dry weather discharge flow shall not exceed 0.26 million gallons per day (mgd).*"
6. Monthly self-monitoring reports for the dry weather season between June 2000 and August 2004 show that the average dry weather flows (May through October) range from 0.196 mgd in the year 2001 to 0.237 mgd in the year 2003. These flows comply with the WDR's dry weather flow limit.
7. The WDRs do not contain a wet weather flow limit. However, since January of 2001, the wastewater collection system has consistently experienced wet weather flows in excess of its wet weather flow design capacity of 0.20 mgd. Monthly self-monitoring reports for the wet weather

periods between January 2001 and April 2004 show that the average wet weather wastewater flows range from 0.256 mgd in the year 2001 to 0.333 mgd in the year 2004. Average wet weather flows have been consistently greater than 0.20 mgd and have increased annually during this time period.

8. Discharge Specification No. B.4 of the WDRs states: *"As a means of discerning compliance with Discharge Specification No. B.3, the dissolved oxygen content in the upper zone (1 foot) of wastewater ponds shall not be less than 1.0 mg/L."* Monthly self-monitoring reports from June 2000 through August 2004 indicate that dissolved oxygen measurements were less than 1 mg/L on eight weekly occasions. The Discharger is required to take monthly measurements at a minimum, but typically measures the dissolved oxygen on a weekly basis.
9. Discharge Specification No. B.5 of the WDRs states: *"Ponds shall not have a pH less than 6.5 or greater than 8.5."* Monthly self-monitoring reports for June 2000 through August 2004 indicate that effluent pH measurements have chronically exceeded a pH of 8.5; with pH measurements ranging from 7.12 to 10.26, and exceeding 8.5 a total of 113 times. The Discharger is required to take monthly measurements at a minimum, but typically measures the pH on a weekly basis.
10. Discharge Specification No. B.7 of the WDRs states: *"A minimum 1.0 freeboard shall be maintained in the ponds at all times."* Monthly self-monitoring reports for February 2001 through April 2004 show that weekly pond freeboard measurements have ranged from 0.1 feet to 3.8 feet. During this period, freeboard was measured at less than 1-foot 89 times during wet weather months. Pond freeboard was also reported at less than 1-foot in February 2001 and from 19 February to 9 April 2004. On 27 and 28 February 2004, the Discharger installed sandbags around the perimeter of Pond Nos. 3 and 4 to prevent a wastewater overflow. The Discharger has indicated that sand bags have also been installed around the ponds in the past.
11. Discharge Prohibition A.1 of WDRs Order No. 99-094 states: *"The direct discharge of wastes to surface waters or surface water drainage courses is prohibited."*
12. On 6 December 2003, a 270-gallon raw sewage spill occurred at 4031 Gray Stone Court in Kelseyville. The spill was the result of a grease blockage in the 6-inch main sewer line that caused a discharge of raw sewage through a cleanout and into a drainage ditch along 3rd Street. The spill report indicated that the discharge did not enter surface waters. The District stated that it would investigate installation of an additional manhole, annual line cleaning would be conducted, and a public education program about grease and grease disposal would be implemented.
13. Monitoring and Reporting Program No. 99-094 requires that the Discharger collect samples from the one on-site well located at the evaporation/percolation ponds on a quarterly basis. However, staff's review indicates that groundwater sampling has not been conducted since 1993 due to insufficient water in the well to collect samples.
14. On 14 July 2004 the Discharger submitted notification that the Kelseyville County Water Works District No. 3 Wastewater Treatment Facility was experiencing capacity problems which have resulted in emergency measures including the sandbagging of two ponds to create additional temporary storage and prevent overflow. Numerous monthly self-monitoring reports indicate that the facility is operating at, or exceeding, the designed treatment capacity for wet weather flows. To

address the capacity issue, the Discharger states that a consultant will conduct an Inflow/Infiltration study during the 2004/2005 budget year. The Discharger also plans to apply for a Small Communities Grant, Water Recycling Grant, and State Revolving Fund loan in 2004/2005 to fund the necessary upgrades to the facility.

15. On 4 August 2004, the County of Lake Department of Health Services Environmental Health Division issued a Compliance Order to Lake County Sanitation District for insufficient treatment and storage capacity during the winter season. This Compliance Order states: *"Pursuant to Section 5412 of the California Health and Safety Code, the local Health Officer hereby orders the District to take any and all action necessary to secure funding and complete design and construction improvements to the Kelseyville System to prevent any further discharges and to adequately, dependably and safely operate the treatment plant."*

Regulatory Considerations

16. As a result of the events and activities described in this Order, the Regional Board finds that the Discharger has caused or permitted waste to be discharged in such a manner that it has created, and continues to threaten to create, a condition of pollution or nuisance. The Regional Board also finds that the Discharger has discharged, and has the potential to discharge, waste in violation of WDRs No. 99-094.
17. Surface water drainage from the facility is to Cole Creek and then to Clear Lake. The beneficial uses of Clear Lake, as stated in the Basin Plan, are municipal and domestic supply; agricultural supply; industrial service supply; water contact recreation; noncontact water recreation; warm freshwater habitat, cold freshwater habitat; spawning, reproduction, and/or early development; and wildlife habitat.
18. Section 13301 of the California Water Code states in part: "When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."
19. Section 13267(b) of the California Water Code states: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."
20. The technical reports required by this Order are necessary to assure compliance with WDR Order No. 99-094 and to assure protection of public health and safety. The Discharger operates the facility that discharges the waste subject to this Order.

21. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
22. On _____ 2004, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.
23. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that pursuant to Sections 13301 and 13267 of the California Water Code, Lake County Sanitation District, its agents successors, and assigns, shall implement the following measures necessary to ensure long-term compliance with WDRs No. 99-094, or any superceding permits or orders issued by the Regional Board.

Any person signing a document submitted under this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

1. The Discharger shall **immediately** comply with all aspects of WDRs Order No. 99-094.
2. By **15 January 2005**, the Discharger shall submit and implement an emergency contingency plan to prevent unauthorized discharges of wastewater during the wet weather months of 2005. The plan shall consider options including, but not limited to: operational adjustments to draw down pond levels in Pond Nos. 3 and 4, sandbagging the pond berms, trucking of effluent to another properly permitted facility, or other temporary measures to prevent discharges.
3. By **1 September 2005**, the Discharger shall submit and implement a short-term contingency plan to prevent unauthorized discharges of wastewater until all long-term measures have been implemented. The plan shall consider options including, but not limited to: diversion of surface runoff away from ponds, enhanced evaporation, trucking of effluent to another properly permitted facility, water conservation measures, reduction of inflow/infiltration, or any other measures to prevent discharges.
4. By **1 September 2005**, the Discharger shall submit an *Inflow and Infiltration (I/I) Assessment Report* that describes the results of the Discharger's I/I evaluation of the collection system, and

describes the repairs which must be completed to reduce I/I to industry standards. The report shall also include a proposed schedule for these repairs.

5. By **1 December 2005**, the Discharger shall submit a *Long Term Wastewater Master Plan* that describes the facility improvements needed to:
 - a. Increase overall storage and disposal capacity as necessary to comply with a 100-year total annual precipitation event;
 - b. Provide enough wastewater storage and disposal capacity for current flows, as well as growth projected over the next 15 years;
 - c. Prevent sanitary sewer overflows;
 - d. Comply with pond freeboard requirements in the WDRs;
 - e. Maintain a pH between 6.5 and 8.4 in each of the wastewater ponds; and
 - f. Ensure that the dissolved oxygen content in the upper zone (1 foot) of wastewater ponds is not less than 1.0 mg/L.

The *Long Term Wastewater Master Plan* shall include a water balance for both the current inflow and projected flows through at least the year 2020, and shall clearly show the times of the year when wastewater must be stored versus when it may be applied to land. The water balance shall evaluate the storage ponds' ability to provide sufficient capacity to maintain two feet of freeboard on a month-by-month basis. The water balance shall include monthly evaporation, precipitation, and percolation rates, and shall identify contributions from major sources to monthly discharge volumes such as subsurface inflows, stormwater run-on, and any inflow and infiltration from the collection system. Rainfall shall be based on the 100-year return period total annual precipitation.

The *Long Term Wastewater Master Plan* shall include a proposed timeline for all improvements.

6. **Within 60 days of staff's written approval** of the *Long Term Wastewater Master Plan*, the Discharger shall submit a *Report of Waste Discharge* (RWD) to allow WDRs to be revised to reflect the proposed upgrades. The RWD consists of the Form 200 (*Application for Report of Waste Discharge*) and a technical report that addresses all items listed in Attachment A to this Order, "*Additional Information Requirements for a Report of Waste Discharge*."
7. By **1 July 2006**, the Discharger shall submit a *Revenue Plan* that describes the costs associated with making the necessary improvements to the collection, treatment storage and disposal system to ensure continuous compliance with WDRs Order No. 99-094. The plan shall show whether the District has the necessary funds to implement the improvements. Should the Revenue Plan show that there are inadequate funds, the District must also include an implementation schedule that shows how the Discharger will raise the funds.
8. By **1 July 2006**, the Discharger shall submit a *Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan* (SSS Plan) that describes the actions designed to prevent, or minimize the potential for sanitary sewer overflows. The Discharger shall maintain the SSS Plan in an up-to-date condition and shall amend the SSS Plan whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sanitary sewer system or sewer facilities) that materially affects the potential for sanitary sewer overflows. The Discharger shall ensure that the

up-to-date SSS Plan is readily available to sewer system personnel at all times and that sewer system personnel are familiar with it.

At a minimum, the Operation and Maintenance portion of the plan shall contain or describe the following:

1. Detailed maps of the sanitary sewer system, identifying sewer mains, manholes, and lift stations;
2. A detailed listing of elements to be inspected, a description of inspection procedures and inspection frequency, and sample inspection forms;
3. A schedule for routine inspection and testing of all pipelines, lift stations, valves, and other key system components. The inspection/testing program shall be designed to reveal problems that might lead to accidental spills and ensure that preventive maintenance is completed;
4. Provisions for repair or replacement of old, worn out, or defective equipment; and
5. Provisions to minimize the need for manual operation of critical systems and provide spill alarms or other “fail safe” mechanisms.

At a minimum, the Overflow Prevention and Response Plan shall contain or describe the following:

1. Identification of areas of the collection system that historically have overflowed and an evaluation of the cause of the overflow;
 2. Maintenance activities that can be implemented to address the cause of the overflow and means to prevent future overflows;
 3. Procedures for responding to sanitary sewer overflows designed to minimize the volume of sewer overflow that enters surface waters, and to minimize the adverse effects of sewer overflows on water quality and beneficial uses;
 4. Steps to be taken when an overflow or spill occurs, and procedures that will be implemented to ensure that all overflows and spills are properly identified, responded to and reported; and
 5. A public notification plan, in which any posting of areas contaminated with sewage is performed at the direction of the Lake County Environmental Health Department. All parties with a reasonable potential for exposure to an overflow event shall be notified
9. By **1 December 2007**, the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan* prepared in accordance with, and including the items listed in, the first section of Attachment B “*Requirements for Monitoring Well Installation Workplans and Monitoring Well Installation Reports.*” The workplan shall describe the locations of existing wells, data on the groundwater flow direction, and installation of additional wells to adequately characterize background water quality and potential groundwater impacts from the wastewater storage and

discharge. Every monitoring well shall be constructed to yield representative samples from the uppermost layer of the uppermost water bearing zone and to comply with applicable well standards. The workplan shall be consistent with, and include the items listed in, the first section of Attachment B, including a Groundwater Sampling and Analysis Plan.

10. **By 1 May 2008**, the Discharger shall submit a *Groundwater Monitoring Well Installation Report* that describes the installation of groundwater monitoring wells and contains the items found in the second section of Attachment B.
11. **Beginning 1 February 2005**, and by the first day of the second month following each calendar quarter (**i.e., by 1 February, 1 May, 1 August, and 1 November each year**), the Discharger shall submit a progress report describing the work completed to date regarding each of the reporting requirements described above.

In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

THOMAS R. PINKOS, Executive Officer

Attachments:

Additional Information Requirements for a Report of Waste Discharge
Requirements for Monitoring Well Installation Workplans and Monitoring Well Installation Reports